LIBRARY
SUPREME COURT, U.S.

Office-Supreme Court, U.S.
FILED
JUN 10 1965
JOHN F. DAVIS, CLERK

IN THE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1964.

No. 260

DORIS NYYSSONEN, Administratrix of the Estate of Einard Nyyssonen, Deceased,
Petitioner,

vs.

BENDIX CORPORATION,
Respondent.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

DAVID RINES
ROBERT H. RINES
RINES AND RINES
No. Ten Post Office Square,
Boston, Massachusetts 02109
Attorneys for Petitioner

E. L. MUNDENHALL, INC., 1108 Oak Street, Kansas City, Mo. 64106, HArrison 1-3030

INDEX

Opinions Below 2
Jurisdiction 2
Questions Presented 3
Constitutional Provision and Rules Involved 6
Statement of the Case 6
Reason for Granting the Writ 15

APPENDICES

Appendix A. Opinion of the Court 1a
Appendix B. Memorandum of District Court 13a
Findings of Fact 14a
Conclusions of Law 15a
Appendix C. Excerpts from Plaintiff's Motion under Rule 52(b) 16a
Excerpts from Plaintiff's Motion under Rule 59(a) 16a
Appendix D. Memorandum of District Court 17a
Appendix E. Excerpts from Cross-Examination of Defendant's Expert, Professor Frazier (R. 640-641) 19a

TABLE OF CASES

Aro Manufacturing Co., Inc. v. *Convertible Top Replacement Co., Inc.*, 1961, 365 U.S. 336, 344 13
Brown v. *Board of Education of Topeka*, 1953, 345 U.S. 972 16
Coleman v. *Miller*, 1939, 307 U.S. 433, 444 16
Halpern v. *United States*, 1958, 2 Cir., 258 F.2d 36, 39 16
Kohn v. *Eimer*, 1920, 2 Cir., 265 Fed. 900, 902 12
LaBuy v. *Howes Leather Co., Inc.*, 1957, 352 U.S. 249 14
Los Angeles Brush Manufacturing Corporation v. *James*, 1927, 272 U.S. 701 14

Louis Dreyfus et Cie. v. *Panama Canal Company*, 1962, 5 Cir., 298 F.2d 733, 738 14

Lyon v. *Boh*, 1924, D.C. S.D. N.Y., 1 F.2d 48, 50, rev., 1926, 2 Cir., 10 F.2d 30 7

Martin v. *Hunter's Lessee*, 1816, 1 Wheat. 304, 328, 331 12

McCullough v. *Cosgrave*, 1939, 309 U.S. 634 14

Muncie Gear Works, Inc., v. *Outboard Marine & Manufacturing Co.*, 1942, 315 U.S. 759, 766 17

Myers v. *Reading Co.*, 1947, 331 U.S. 477, 479 14

Niemotko v. *Maryland*, 1951, 340 U.S. 268, 271 17

Rollerson v. *United States*, 1964, C.A. D.C., 343 F.2d 269, 272, n. 6 12

Sinclair & Carroll Co., Inc. v. *Interchemical Corporation*, 1945, 325 U.S. 327, 330 17

Smith v. *Snow*, 1935, 294 U.S. 1, 14 12

Special Equipment Co. v. *Coe*, 1945, 324 U.S. 370, 377 13

United States v. *Bethlehem Steel Company*, 1922, 258 U.S. 321, 327 16

United States v. *El Paso Natural Gas Company*, 1964, 376 U.S. 651, 656-657 and note 4 14

United States Plywood Corporation v. *General Plywood Corporation*, 1964, D.C. Ky., 230 F. Supp. 831, 832, 833 15

Winans v. *The New York and Erie Railroad Company*, 1858, 21 How. 88, 101 12

Fifth Amendment to the Constitution of the United States 6

Federal Rules of Civil Procedure:

Rule 52(a) 4, 5, 6, 17

Rule 52(b) 5, 6, 10, 15

Rule 59(a) 5, 6, 10, 15

Rule 77(b) 5, 6, 9, 14, 17

Supreme Court Rule 19(1)(b) 15, 18
Supreme Court Rule 45(1) 16
Fritz Machlup, "Patents and Inventive Effort", 133 Science, No. 3463, May 12, 1961, page 1463 7
Judge Merrill E. Otis, 1 F.R.D. 83 14
Admiral Rickover, Hearings before the Subcommittee on Patents, Trademarks, and Copyrights, of the Committee on the Judiciary, United States Senate, 87th Congress, First Session, pursuant to S. Res. 55 on S.1084 and S.1176, on "National Patent Policy", June 2, 1961, p. 2 16

IN THE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1964.

No. .....

DORIS NYYSSONEN, Administratrix of the Estate of Einard Nyyssonen, Deceased,
Petitioner,

vs.

BENDIX CORPORATION,
Respondent.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

The petitioner, Doris Nyyssonen, administratrix of the estate of Einard Nyyssonen, deceased, respectfully prays that a writ of certiorari issue to review a final judgment of the United States Court of Appeals for the First Circuit, entered in the above-entitled action on March 3, 1965 (R. 1129), in which the petitioner was the plaintiff-appellant. On April 9, 1965 (R. 1182), the Court of Appeals, without opinion, denied a timely petition for rehearing, filed March 16, 1965 (R. 1130).

A certified transcript of the record in the above case (together with 9 copies thereof), including the proceedings in the said Court of Appeals, is furnished herewith.

OPINIONS BELOW

The opinion and judgment of the Court of Appeals (R. 1117, 1129), reported at 342 F.2d 531, 144 U.S.P.Q. 555, appears as Appendix A to this petition, p. 1a.

A Memorandum constituting the opinion, Findings of Fact, Conclusions of Law and Judgment of the District Court (R. 952-970) is reported at 137 U.S.P.Q. 853. Pertinent extracts therefrom are annexed to this Petition as Appendix B, p. 13a. The petitioner filed motions under Rules 52(b) (R. 970-1014) and 59(a) (R. 1014-1026) of the Federal Rules of Civil Procedure, pertinent extracts from which are annexed to this petition as Appendix C, p. 16a. The District Court filed a Memorandum, embodying an order (R. 1026-1027) denying these motions, which is reported at 137 U.S.P.Q. 860 and is reproduced in Appendix D to this petition, p. 17a.

JURISDICTION

The judgment of the said Court of Appeals was dated and entered March 3, 1965 (R. 1129). A timely petition for rehearing was denied April 9, 1965 (R. 1182).

The jurisdiction of this Court to review the above-mentioned judgment of the said Court of Appeals is invoked under the provisions of 28 U.S.C., Section 1254(1).

QUESTIONS PRESENTED

In a case in which the federal judicial system appears to have broken down, by reason of both the District Court and the Court of Appeals professing themselves to be incompetent, for lack of technical training, to perform the judicial duties that Congress has assigned to them to perform, the following questions are presented:

I

Relating to the Complete-Combination Claims 1 and 10 of the 098 Patent

Where a passage of a patent specification is admitted, on cross-examination, by an expert witness, to be capable of having two interpretations, under one of which the patent would be held to be infringed, and under the other not infringed (though the expert witness volunteers the statement that he does "not subscribe to" that interpretation under which the patent would be held to be infringed), may either the District Court or the Court of Appeals delegate to the expert witness its duty to decide the issue of infringement, particularly since the passage is worded in simple non-technical English that does not require *any* technical training to understand it?

II

Relating to the Sub-Combination Claim 1 of the 131 Patent

On appeal from a judgment of the District Court, holding a particular claim of a patent not infringed, for a particular reason specified, may the Court of Appeals, professing itself to be unable, after limited oral argument, to understand "intelligently" what is covered by the claim, but refusing (being not "disposed") to permit any fur-

ther argument whatever, whether oral or written, through the medium of which it itself recognized that it could have obtained such understanding, make a new holding of non-infringement, not for the particular reason specified by the District Court, or, in fact, for any other reason, but for no reason at all?

III

Relating to the Cloud Unnecessarily Cast by the Volunteered Statement of the Court of Appeals That "We Think It Clear That" the Sub-Combination Claim 1 of the 131 Patent Is Invalid, for Double Patenting

On appeal from a judgment of the District Court, holding a sub-combination claim of a patent invalid, for double patenting over a complete-combination claim of another patent that was issued on the same day, may the Court of Appeals, though the issue as to whether complete-combination and sub-combination claims of two patents issued on the same day is purely legal, requiring no technical training to resolve it, refuse either to affirm or disaffirm the District Court's holding of invalidity for double patenting, but, nevertheless, volunteer a statement to the effect that "we think it clear that" the said sub-combination claim is invalid for double patenting, thus unnecessarily casting a cloud upon the validity of the said sub-combination claim, but deciding nothing?

IV

Relating to the Scope of Rule 52(a) of the Federal Rules of Civil Procedure

On appeal from a judgment of the District Court, based upon a Memorandum opinion adopting as its own (though admitting that they were therefore "less likely to reflect original thought or expression") the Findings of Fact drafted by one of the litigants, justifying its so doing upon

the ground that it had "meticulously checked" the Findings against the testimony of the said litigant's expert witness (which "check", however, was of the direct examination only of this expert witness, but without any check thereof against entirely different testimony of the same expert witness on cross-examination), has the Court of Appeals correctly construed Rule 52(a) of the Federal Rules of Civil Procedure as authorizing it to approve those Findings of Fact as not clearly erroneous, without itself first examining the record as a whole?

V

Relating to Rule 77(b) of the Federal Rules of Civil Procedure

Does Rule 77(b) of the Federal Rules of Civil Procedure, requiring trials to be "conducted in open court", authorize the District Court to treat a trial before it as though it had been conducted before the expert witness for one of the parties, belatedly "named" as master, which expert witness, furthermore, the District Court itself recognized as having a "natural bias"?

VI

Relating to Due Process

Upon appeal from both a final judgment of the District Court, issued without oral argument, and also its order denying "on their merits", without argument of any kind, oral or written, motions under Rules 52(b) and 59(a) of the Federal Rules of Civil Procedure, may the Court of Appeals, itself severely limiting oral argument, and refusing (being not so "disposed") to permit any further argument whatever, whether oral or written, through the medium of which it itself recognized that it could have become enabled to perform its judicial duties, issue a

judgment, in effect approving the issuance of the final judgment without oral argument, and, in effect, completely ignoring the appeal with respect to the denial of the motions under Rules 52(b) and 59(a)?

CONSTITUTIONAL PROVISION AND RULES INVOLVED

Extracts from the Fifth Amendment and Rules 52(a) and 77(b) of the Federal Rules of Civil Procedure

Fifth Amendment: No person shall be * * * deprived of life, liberty, or property, without due process of law * * *

52(a). * * * Findings of fact shall not be set aside unless clearly erroneous * * *.

77(b). * * * All trials upon the merits shall be conducted in open court * * *.

STATEMENT OF THE CASE

This is a suit for infringement of the two claims 1 and 10 of one patent, No. 2,790,098, covering a complete-combination synchronous machine, and one claim, claim 1, of another patent, No. 2,790,131, covering a sub-combination of the same synchronous machine, both patents being issued on the same day. The inventions covered by these claims have considerable military value (R. 109, 536).

The inventor named in the two patents in suit, Einard Nyyssonen, who died during the pendency of the appeal, was a mechanical engineer (R. 429) in the employ of a small company. He was one of the lone, independent, garret-type, non-corporate (referring to the large cor-

porations) inventors of the country, who, according to the evidence*, still produce forty per cent of our inventions. He made the inventions while engaged in the solving of a problem relating to armament (R. 430). Contrary to the usual procedure (Judge Learned Hand, *Lyon* v. *Boh*, 1924, D.C.S.D.N.Y., 1 F.2d 48, 50, rev., 1926, 2 Cir., 10 F.2d 30), these inventions met with prompt recognition in the Patent Office (R. 819, 820). The defendant, though it had for many years been compelled to content itself with inferior solutions of the problem (R. 461-463), knew nothing about these inventions until the inventor invited attention thereto (R. 706). As soon as possible thereafter, the defendant adopted the inventions (Opinion of the Court of Appeals, Appendix A, p. 8a, *infra*, "The defendant admits its change of design"), heralded them to the trade as its own (R. 781, 785-787, 827-832), received a "Product of the Month" Feature Product Award (R. 698) therefor, and filed a number of patent applications therefor in this country and abroad.

The defendant has refused to recognize the patents, wherefore it became necessary to enter this suit. After a period of some eighteen years, since May 2, 1947 (R. 434), when the inventor first brought his inventions to his attorney for patenting, the case has now, at last, reached this Court.

The complete-combination claims 1 and 10 of the 098 patent cover a machine that embodies both a stationary part, called a stator, and a movable part, called a rotor. The rotor rotates within a circular opening of the stator. The subcombination claim 1 of the 131 patent covers the stator only; as the opinion of the Court of Appeals under-

*Fritz Machlup, "Patents and Inventive Effort", 133 Science, No. 3463, May 12, 1961, page 1463.

stands correctly (Appendix A, p. 11a, *infra*), it "has no moving parts", no rotor.

Conventionally, the field-magnet windings of the rotor may be excited by either direct current or alternating current. There is nothing novel in either of these two methods of excitation; and, as was physically demonstrated at the trial, without dispute or contradiction, by operation of equipment that is in evidence (so that it could be re-demonstrated in this Court), it does not (R. 428)

> "make any difference at all, insofar as getting the improvement of the kind of winding operation in claims 1 and 10 of the 098 patent, and claim 1 of the 131 patent, whether the rotor"

is excited conventionally by direct current or alternating current.

The concluding sentence of the opinion of the Court of Appeals (Appendix A, p. 12a, *infra*), "affirming the judgment of the District Court insofar as it rests upon the issue of infringement", however, is based upon the very ground of this difference in the method of excitation (by direct or alternating current) of the rotor.

And this despite the fact that the Court of Appeals "understands" (Opinion, Appendix A, p. 7a, *infra*, line 2) that, as the District Court found (Appendix B, p. 14a, *infra*, Finding 15),

> "the gist of Nyyssonen's patents lies in the numbers of conductors in each slot [of the stator] and in their inter-connection called the conductor distribution",

and has nothing whatever to do with the rotor, or whether it is excited by direct or alternating current.

Though the Court of Appeals (though not the District Court, Finding 59, Appendix B, p. 15a, *infra*) purported, in

the said concluding sentence of its opinion (Appendix A, p. 12a, *infra*), to include all three claims in this reasoning (as to non-infringement upon the ground of the nature of the current excitation of the rotor), the petitioner and the defendant (R. 1172, second paragraph) are agreed that that reasoning does not apply to the sub-combination claim 1 of the 131 patent, which recites no rotor, at all, but is limited to the stator only. This sub-combination claim 1 could be held to be not infringed only if the accused machine embodied *a different kind of stator,* not rotor, than that claimed. In actual fact, therefore, as to this sub-combination claim 1 of the 131 patent, the Court of Appeals neither affirmed nor disaffirmed the holding of the District Court relating to non-infringement (Finding 59, Appendix B, p. 15a, *infra*), but made a brand-new holding of non-infringement of its own, and giving no reason whatever therefor.

The Court of Appeals also volunteered the statement that "we think it clear" (Appendix A, p. 12a, *infra*), though without actually so deciding, that this sub-combination claim 1 of the 131 Patent is invalid for double patenting over the complete-combination claim 10 of the 098 patent, —and this despite the fact that the two patents issued on the very same day and they expire simultaneously,—thus unnecessarily casting a cloud upon the validity of the said sub-combination claim 1 of the 131 patent.

It will be necessary to make reference also to the proceedings in the District Court.

In the old days, these patent cases were tried before masters. Though the present case, on the other hand, was started to be "conducted in open court", as required by Rule 77(b) of the Federal Rules of Civil Procedure, it later assumed the appearance of the old practice. Explaining (R. 953, Appendix B, p. 13a, *infra*) that it would other-

wise be incompetent to perform the judicial duties that Congress has assigned to it to perform, because it

> "has only the most elementary training in science and mathematics, and has little experience with modern technological developments",

the District Court thereupon treated the case as on the assumption that it had been tried, not "in open court", but before a master. The master whom the District Court thereupon assumed belatedly to have been "named" (R. 953, Appendix B, p. 13a, *infra*), was the defendant's expert witness, Professor Frazier. This expert witness' testimony, admittedly on *direct examination* only (Appendix B, p. 14a, lines 11-12), without regard to entirely different testimony of this same expert witness *on cross-examination*, was thereupon used by the District Court to "govern my findings" (R. 953, Appendix B, p. 13a, *infra*); which led to the District Court adopting, as its own, the Findings of Fact that were proposed by the defendant, based upon *this direct examination only*.

The District Court itself admitted that these Findings of Fact were not really its own, wherefore (R. 1027, Appendix B, p. 18a, *infra*), they were

> "less likely to reflect original thought or expression than a deliberate, informed, conscientious choice between proferred courses of action".

Though the District Court gave the parties leave (R. 681), at the end of the trial, to file briefs, this leave did not include oral argument and it did not provide for an opportunity even to criticize the said proposed Findings of Fact. The plaintiff offered such criticism, by the above-referred-to motions under Rules 52(b) and 59(a). The District Court denied these motions "on their merits" (R. 1027, Appendix B, p. 18a, *infra*), however, without

hearing any argument, at all, oral or written. The Court of Appeals, in effect, ignored the petitioner's appeal from this denial, stating (Appendix A, p. 12a, line 4 from the bottom, *infra*), contrary to fact (see p. 15, lines 4-10, *infra*), that the appeal from this denial had no relation to the issue of infringement (which issue of infringement is all that the Court of Appeals purported to decide).

In the Court of Appeals, the parties were permitted limited oral argument. The Court of Appeals realized that it could have obtained an "intelligent" understanding of the case through the medium of additional oral argument, or additional briefs, but it stated that it was not "disposed" to permit either (Appendix A, p. 12a, line 4, *infra*).

Discussion of Question I

A particular passage of the specification of the 098 patent, column 3, lines 60-63 (R. 36), reads that the field-magnet windings of the rotor

> "*may be* conventionally excited from a suitable source of direct current to produce a magnetic field, stationary with respect to the rotor 20" (Italics supplied).

On direct examination, the defendant's expert witness testified, in effect (as quoted by the Court of Appeals, Appendix A, p. 10a, just below the middle of the page, *infra*), that the italicized phrase "may be" must be construed to have the meaning "shall be"; thus excluding the disclosure of a rotor magnetic field that is "stationary in space [though varying in time, because alternating], with reference to a magnet" (Opinion, just below the middle of p. 9a, *infra*), the rotor. It obviously requires no technical knowledge, however, to construe the above italicized phrase "may be". As a matter of simple English, the phrases "may be" and "shall be" have very different meanings (as held,

for example, by Mr. Justice Story, *Martin* v. *Hunter's Lessee*, 1816, 1 Wheat. 304, 328, 331).

On cross-examination, the defendant's expert witness was himself forced, therefore, to admit (R. 640-641, Appendix E, p. 19a) that the above-quoted passage of the patent specification *could* be interpreted so as to include also a disclosure of a rotor that is excited by alternating current, as well as direct current (thereby including the disclosure of a rotor magnetic field that is "stationary with respect to the rotor", even though varying in time, because alternating). He volunteered, however, the "burdensome impertinence" (Judge Learned Hand, *Kohn* v. *Eimer*, 1920, 2 Cir., 265 Fed. 900, 902), the "conclusory testimony" (*Rollerson* v. *United States*, 1964, C.A. D.C., 343 F.2d 269, 272, n. 6), that he personally does "not subscribe to" the latter interpretation. The exact testimony is reproduced in Appendix E, p. 19a, *infra*.

The defendant agrees (R. 1176, lines 1-6) that the interpretation of the meaning of the said phrase "may be" is the sole point of dispute between the parties with respect to the issue of infringement relating to the complete combination claims 1 and 10 of the 098 patent.

This Court has many times ruled that the only function of an expert witness is to enlighten the Court as to the facts involved, and that it is the function of the Court, not the expert witness, to decide the merits of the case. *Winans* v. *The New York and Erie Railroad Company*, 1858, 21 How. 88, 101.

The Court has also many times laid down the rule, furthermore, as in *Smith* v. *Snow*, 1935, 294 U.S. 1, 14, that

> "if the claim were fairly susceptible of two constructions, that should be adopted which will secure to the patentee his actual invention, rather than to adopt a construction fatal to the grant."

Discussion of Question II

All that need be said as to Question II has already been said, p. 9, lines 4-8, *supra.*

Discussion of Question III

Based upon that portion of Finding 27 (R. 959, Appendix B, pp. 14a-15a, *infra*), that finds that the sub-combination claim 1 of the 131 patent

> "is exactly that which forms [as a sub-combination] the stator of the 098 patent",

the District Court concluded, as a pure question of law, that (R. 969, Appendix B, p. 15a, *infra*)

> "2. Claim 1 of U. S. Patent No. 2,790,131 is invalid for double patenting."

This pure question of law requires no technical training for its resolution. *Special Equipment Co.* v. *Coe,* 1945, 324 U.S. 370, 377. *Aro Manufacturing Co., Inc.* v. *Convertible Top Replacement Co., Inc.,* 1961, 365 U.S. 336, 344.

Discussion of Question IV

Contrary to what has been gratuitously assumed by both the District Court and the Court of Appeals, there is no question whatever involved "of the relative credibility of opposing expert witnesses" (Opinion, p. 2a, *infra*). The only question of credibility is between the testimony *on direct examination* and *cross-examination* of the same expert witness for the defendant.

By approving the District Court's adoption of the defendant's Findings of Fact, instead of deciding the case for itself, through an examination of the record as a whole, including the defendant's expert's testimony *on cross-examination,* the Court of Appeals was in conflict with this

Court's recent holding (decided since the trial, which is a ground for certiorari, *Myers* v. *Reading Co.*, 1947, 331 U.S. 477, 479), *United States* v. *El Paso Natural Gas Company*, 1964, 376 U.S. 651, 656-657 and note 4.

It was in conflict also with *Louis Dreyfus et Cie.* v. *Panama Canal Company*, 1962, 5 Cir., 298 F.2d 733, 738, in which the Court of Appeals for the Fifth Circuit held that, where a District Court adopts Findings of Fact that have been prepared by a party litigant, particularly "in a case involving complex and technical subject matter, as in patent cases", it should do so only after it has "reached its decision independently *before* placing reliance on the proposed findings" (italics the Court's).

Discussion of Question V

The requirement of Rule 77(b) that trials "shall be conducted in open court" has consistently been enforced by this Court. *Los Angeles Brush Manufacturing Corporation* v. *James*, 1927, 272 U.S. 701. *McCullough* v. *Cosgrave*, 1939, 309 U.S. 634. *LaBuy* v. *Howes Leather Co., Inc.*, 1957, 352 U.S. 249 (a case the complexities involved in which related to complicated matters other than patents).

These three decisions will become overruled, and Rule 77(b) will become abrogated, if this Court should approve the District Court's delegating (the word used by Judge Merrill E. Otis, 1 F.R.D. 83) the decision of this case to the expert witness for the opposing litigant, assumed belatedly to have been "named" as master, despite his "natural bias". Other District Courts will promptly likewise adopt this procedure.

Discussion As to Question VI

In addition to approving the District Court's delegation (without even any oral argument) of the decision of the

case to the defendant's expert witness, the Court of Appeals (Appendix A, p. 12a, lines 4 and 5 from the bottom) also ignored the appeal from the denial of the motions under Rules 52(b) and 59(a), which included Findings 58, 59 and 60 (R. 1001-1005, Appendix B, p. 15a) expressly relating to the issue of infringement. The very issue relating to the expression "stationary with respect to the rotor", for example, as used in the above-quoted (p. 11) passage of the specification of the patent, is discussed, in connection with Finding 58f, at R. 1003 (Appendix B, p. 16a, *infra*).

REASONS FOR GRANTING THE WRIT

This petition raises several very important issues.

A. This Court Should Inform Congress, If Such Be the Fact, That the Judicial System That It Has Set Up Has, Indeed, Broken Down.

So far as known, this Court has never decided, but now should decide, Rule 19(1)(b) of this Court, whether the federal courts may refuse to perform the duties that Congress has set before them to perform, upon the ground of lack of technical training.

Examples of how other courts have solved this problem, merely through the medium of oral argument, are given at R. 1160-1161. In one case, *United States Plywood Corporation* v. *General Plywood Corporation*, 1964, D.C. Ky., 230 F. Supp. 831, 833, for example, a District Court became enabled to "reject" the proposed Findings of Fact of the parties, in a field in which it confessed itself (quoting the precise language of the District Court in the present case) to be wholly untrained technically, and to draft its own Findings of Fact, merely by listening patiently to five days of oral argument, page 832.

This Court has many times demonstrated its appreciation of the value of oral argument in cases that it has found it to be difficult otherwise to decide. Rule 45(1) of this Court. *Coleman* v. *Miller,* 1939, 307 U.S. 433, 444. Upon occasion, indeed, this Court has even called for further argument. *Brown* v. *Board of Education of Topeka,* 1953, 345 U.S. 972.

B. This Court Should Decide Whether It Is Still Possible to Encourage Lone Inventors to Make Inventions Having Military Value.

This Court has pronounced it to be "a policy of wisdom" to encourage inventions relating particularly to the defense of our country, *United States* v. *Bethlehem Steel Company,* 1922, 258 U.S. 321, 327; with the same end in view, Congress, *Halpern* v. *United States,* 1958, 2 Cir., 258 F.2d 36, 39,

> "evinces a strong concern that inventors be encouraged to discover inventions having military value;"

and Admiral Rickover* has expressed himself as

> "primarily interested in the subject of patents as it relates to national security, the strength and safety of our country."

The grave problem arises, therefore, as to how we shall be enabled to encourage these lone inventors to continue to make inventions having military value, if our federal courts are to be permitted to confess themselves unable to protect these inventors, without even trying to do so by the simple expedient of hearing oral argument, and sufficient oral argument.

---

*Hearings before the Subcommittee on Patents, Trademarks, and Copyrights, of the Committee on the Judiciary, United States Senate, 87th Congress, First Session, pursuant to S. Res. 55 on S. 1084 and S. 1176, on "National Patent Policy", June 2, 1961, p. 2.

The Court should decide this issue in the present case, because it is "unlikely" (*Muncie Gear Works, Inc.* v. *Outboard, Marine & Manufacturing Co.*, 1942, 315 U.S. 759, 766) that another of these forty-per-cent lone inventors (see p. 7, line 2, *supra*) will have the fortitude to keep on fighting for his patent rights over a period as long as eighteen years.

C. This Court Should Decide the Proper Scope of Rules 52(a) and 77(b) of the Federal Rules of Civil Procedure.

Still another issue, raised by Questions IV and V, which this Court should now decide is as to the proper scope of Rules 52(a), see p. 14, lines 1-2, *supra*, and 77(b), see p. 14, lines 5-4 from the bottom, *supra*.

D. The Decision of the Court of Appeals Is in Conflict with Prior Decisions of This Court and of Other Courts of Appeals.

Attention is invited to the two cases cited at the bottom of p. 12, the two cases at the middle of p. 13, the six cases on p. 14, and the cases referred to in the last paragraph on p. 16. Also, particularly in connection with Question III, "normally * * * the better practice," *Sinclair & Carroll Co., Inc.* v. *Interchemical Corporation*, 1945, 325 U.S. 327, 330, is to inquire "fully into the validity of this patent".

E. The Issue of Due Process.

Another issue raised, not only by Question VI, but also by all the other questions, as well, is whether the petitioner has been accorded due process. Upon such issue, this Court "will re-examine the evidentiary basis" for itself. *Niemotko* v. *Maryland*, 1951, 340 U.S. 268, 271.

F. A Further Issue That This Court Should Decide.

A further issue that this Court should decide is whether the District Court and the Court of Appeals both have not

so far departed from the accepted and usual course of judicial proceedings as to call for the exercise of this Court's power of supervision. Rule 19(1)(b) of this Court.

WHEREFORE, it is respectfully submitted that this petition for a Writ of Certiorari should be granted.

Respectfully submitted,

DAVID RINES
ROBERT H. RINES
RINES AND RINES
No. Ten Post Office Square,
Boston, Massachusetts 02109
Attorneys for Petitioner

APPENDIX A

United States Court of Appeals

For the First Circuit

No. 6189.

EINARD NYYSSONEN,
PLAINTIFF, APPELLANT,

v.

BENDIX CORPORATION,
DEFENDANT, APPELLEE.

APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS.

Before WOODBURY, *Chief Judge*, and HARTIGAN and ALDRICH, *Circuit Judges*.

Robert H. Rines, with whom *David Rines* and *Rines and Rines* were on brief, for appellant.

Morris Relson, with whom *Floyd H. Crews* and *Robert R. Keegan* were on brief, for appellee.

OPINION OF THE COURT.

March 3, 1965.

WOODBURY, *Senior Circuit Judge* (by designation). We are concerned on this appeal with two patents issued to the plaintiff-appellant on the same day, April 23, 1957. One, No. 2,790,098, is for a Polyphase Synchronous Machine; the other, No. 2,790,131, is for a Polyphase Transformer System.[1] In issue are claims 1 and 10 of the 098 patent and claim 1 of the 131 patent. The court below found all three claims both invalid and not infringed, and entered a

[1] We shall refer to the patents hereinafter by the last three digits of their respective numbers.

judgment dismissing the plaintiff's complaint from which he has taken this appeal.[2]

The patents are long. One consists of 11 pages of drawings (26 figures) and almost 50 columns of text, and the other 9 pages of drawings (21 figures) and almost 44 columns of text. Both are highly technical in the fields of advanced mathematics and electrical engineering in which no member of this court can profess any competence. We can say with the court below that this case presents great difficulties to judges like ourselves who have only the most elementary training in science and mathematics and little experience with modern technological developments.

The court below in recognition of its avowed limitations rested its decision basically on its evaluation of the relative credibility of opposing expert witnesses. In view of the extreme technicality of the subject matter and the serious risk of making scientific and technological errors, the court invited each party to submit draft findings of fact. Then, concluding on the basis of observation at the trial and rereading the transcript that the defendant's expert was the clearer, more credible and more expert, it adopted the defendant's draft. It did not do so as a matter of rote, however. It said:

> "Defendant's draft, as appears from supporting citations, rests, in the places where the issues are sharpest, upon Dr. Frazier's testimony and upon admissions by plaintiff's counsel and plaintiff's own expert. My own findings of fact are in most respects verbatim copies of this draft, but these findings do reflect my independent and meticulous check of the record itself."

The plaintiff-appellant complains of the District Court's technique of decision asserting that it deprives him of due process of law. We do not agree.

---

[2] He also appealed from orders denying motions under Rule 52(b) and 59(a) of the Federal Rules of Civil Procedure.

Counsel are certainly entitled to file proposed findings of fact on their own initiative and we see nothing whatever in any way irregular for a court to ask them to do so, particularly in a highly technical and complicated case like the present. Nor is there any reason why counsel should not cast their requests in a form which if approved could be adopted by the court as its findings. *Hazeltine Research, Inc.*, v. *Admiral Corp.*, 183 F.2d 953 (C.A. 7, 1950), *cert. denied*, 340 U.S. 896. Ordinarily we think it the better practice for the trial court to prepare its own findings with such help as it may derive from counsels' requests. But this is no ordinary case. In a case of this difficulty we think the court below was fully justified in avoiding the risk of slipping inadvertently into serious scientific error by relying heavily upon counsel for technical findings based upon highly technical evidence. The question is whether the findings are supported by the evidence. *United States* v. *Crescent Amusement Co.*, 323 U.S. 173, 184-185 (1944).

We turn now to the patents themselves.

A synchronous machine such as is covered in the 098 patent is defined by the American Institute of Electrical Engineers in its Standard Definitions as ". . . one in which the average speed of normal operation is exactly proportional to the frequency of the system to which it is connected." These machines consist, as we understand it, either of a synchronous generator, defined on the same authority as ". . . a synchronous alternating current machine which transforms mechanical power into electrical power" or a synchronous motor defined as ". . . a synchronous machine which transforms electric power from an alternating current system into mechanical power." The purpose of these machines operating together in a synchronous system is to transmit synchronized rotary motion over a distance by means of electricity. An electric clock is an example.

Almost all electric power produced in this country is

60-cycle alternating current. This means that the current reverses in direction from positive to negative and from negative back to positive again 120 times per second. Each cycle includes current in one direction for 1/120 of a second and current in the opposite direction for the next 1/120 of a second. The current is maintained at this frequency of alternation by running the synchronous generator which produces the current at constant speed, the frequency of the current being in direct proportion to the speed of rotation of the rotor of the generator. An electric clock uses a synchronous motor and keeps accurate time for two reasons. The first is that the generator is maintained at constant speed to produce a constant 60-cycle frequency. The second is that the synchronous motor in the clock runs at a speed directly proportional to the frequency of the current supplied to it. The hands move 1/60 of a second for each full cycle of current.

The art of synchronous machines is not new. They have been known and used at least since about the turn of the century as appears from the reference to such machines in Patent No. 765,995 issued to Alexanderson on March 28, 1905. Nyyssonen's claimed contribution to the art is smaller size and greater accuracy, which he says he attained by novel means. The defendant-appellee disputes Nyyssonen's claimed contributions, denies the novelty of his means and asserts that the accused devices it manufactures do not infringe even if Nyyssonen's patents are valid. The court below resolved these issues against the plaintiff. It held all claims in issue invalid in view of the prior art, claim 1 of the 131 patent also invalid for double patenting, and none of the claims infringed.

The testimony of the defendant's expert witness, whom the court below found clear, credible and skilled and upon whom it relied, provides ample evidentiary support for this finding. But plaintiff's counsel contends that no question

of this witness's credibility is involved because his testimony is demonstrably mistaken, wherefore the findings based thereon are "clearly erroneous."

Resolution of this contention takes us into the construction and operation of generators and motors in general and then leads on into technical details many of which we find beyond our comprehension, for the plaintiff's patents are not only voluminous but are couched in a technical vocabulary with which we are wholly unfamiliar. We frankly admit that we cannot read them intelligently. We quote claim 10 of the 098 patent in the margin to illustrate our difficulty.[3] Moreover, we have great difficulty in understanding, even in a general way, the technical testimony of the experts and the discussion of that testimony by counsel orally and in their briefs. However, we must do the best we can.

Generators and motors are structurally very similar.

---

[3] A synchronous machine having in combination, stator and rotor elements, one of the elements having a magnetizable core provided with an assembly, stationary with respect to the said one element, of substantially equiangularly spaced slots comprising one or more collections each of substantially the same number of slots, a polyphase winding comprising a plurality of phase windings each having a number of conductor groups substantially equal to the number of slots, a conductor group of each phase winding being disposed substantially in each slot, the numbers of conductors of the conductor groups of each phase winding varying substantially as the absolute values of the sine over a total range substantially equal to 180 degrees multiplied by the number of collections of slots at angular increments each substantially equal to the said total range divided by the number of slots, the respective total ranges being displaced with respect to one another an angular amount substantially equal to the phase displacement of the phase windings, the directions of winding of the conductors of the conductor groups of each phase winding changing alternately with, and with the negative of, the sign of the said sine, the conductor groups of the respective phase windings being connected in series along the said directions of winding, and the other element having means for producing a magnetic field, stationary with respect to the said other element, of substantially equiangularly spaced poles of alternately opposite polarity equal in number to the number of slots plus or minus the number of collections of slots.

Both operate by systems of electro-magnets and both have two main components, a stator, which is a stationary part and a rotor, which is a rotating part. All such machines have a field member and an armature, either one of which may be the rotor while the other is then the stator. For present purposes the rotor will be deemed the field member.

All rotating electric machines are provided with a predetermined number of electro-magnetic poles arranged alternately north and south, or positive and negative, around the periphery of the rotor. The number of pole pairs determines the speed of the machine, be it a generator or a motor. We see no need to elaborate further on this feature of electric generators and motors. The stators of these machines, regarded as the armatures, consist of electro-magnets equiangularly spaced around the periphery facing the magnets of the rotor. These magnets are separated by apertures called slots in which are disposed electric conductors in the form of wires. The movement of the rotor field winding electro-magnetically induces voltages in these conductors and these voltages are the output electricity of the generator.

The total slots in the stator of the machine covered by the 098 patent are divided into "collections" or "sets" and the number of slots per "collection" differs from the number of rotor poles per "collection" by one. No specific number of slots is specified in the patent. Nyyssonen's primary example is 9 slots and 8 poles but his patent is general enough to cover any number. While "collections" or "sets," sometimes called "repeatable groups," of slots are identical,[4] the number of conductors or wires in each

---

[4] We are not impressed by the appellant's argument that this is not so because patent 098 is not limited to the same number of stator slots in each collection. All he seems to have in support of his contention is lack of specific language in the patent and Fig. 22 showing collections the mirror images of one another. Anyway we do not consider resolution of this dispute dispositive of the case.

slot of each group is not, but varies from one slot to the next. The court below found, and as we understand the case, the gist of Nyyssonen's patents lies in the numbers of conductors in each slot and in their inter-connection called the conductor distribution.

Nyyssonen's conductor distribution is called a "sine distribution" which means that the number of conductors in any one slot for one phase winding is in proportion to the trigonometric sine function of an angle associated with the particular slot called in the patent the "phase-sequence angle."[5] The basic bones of contention on the issue of validity is whether the sine distribution was new with Nyyssonen, the court below held it was not, and whether the defendant used that distribution in its accused devices or used instead an earlier distinctly different one called the Glass distribution, as the court below held.

Solution of this issue requires discussion of the accused machines which are not synchronous machines but synchros regarded by the plaintiff's expert as a sub-class of synchronous machines but by the defendant's expert as in a separate category. Synchros like synchronous machines consist of a stator and a rotor but they are not designed or intended, although they might perhaps be used, for synchronous continuous rotary motion. Synchros are remote positioning devices designed for the transmission of angular values to a distance by electricity, either through wires or by radio.

A synchro system consists of two synchros, a transmitter

---

[5] Additionally the patent describes an alternate opposite direction of winding of the conductor groups of each phase winding. This means that when the slots are arranged in a particular sequence the current in the conductors is in one direction in one slot and in the opposite direction in the next slot of the sequence. However, the court below, clearly on adequate evidence, found alternately opposite direction of winding to be inherent in all synchronous machines and not a distinguishing characteristic of Nyyssonen. We need give this feature no further consideration.

and a receiver. When such a system is electrically energized the rotor of the receiver will align itself with respent to its stator with the alignment of the rotor of the transmitter with respect to its stator. Thereafter when the rotor of the transmitter is turned the rotor of the receiver will move in the same direction to the same extent. They are used among other places on submaries to indicate deviation of the vessel from its level. A gyro on a submarine tells which way is "up." When the vessel tilts, its angle with respect to "up" changes. Thus if a gyro is appropriately attached to the rotor of a transmitter synchro, the rotor will be moved with the vessel's tilt and an electrically connected receiver synchro in an indicator will show the direction and extent of the tilt.

The conductors in the slots of the stators of the accused devices vary in number from slot to slot as in Nyyssonen. But the defendant contends that it does not use a sine distribution but a Glass distribution, that is to say, a distribution based upon the disclosure of patent No. 2,488, 771 issued to its assignor and research man, John P. Glass, Jr., in 1949 on a 1944 application for "Induction Devices Having a Substantially Pure Sine Relation Between the Coupling and the Relative Displacement of Its Elements." The plaintiff concedes, as he must to escape anticipation, that the defendant indeed originally used a Glass distribution which was not Nyyssonen's distribution. But he contends that after Nyyssonen showed his patent to the defendant is changed its devices to his distribution, indeed, brazenly pirated his invention. The defendant admits its change of design. But it asserts that its change was not to Nyyssonen's distribution and owed nothing whatever to his teaching but resulted entirely from its independent research in developing the Glass distribution in the light of the prior art. The plaintiff admits that the defendant indeed used the old Glass techniques in its new accused

synchros but he asserts that it uses his novel sine distribution in them as well.

The Glass distribution and the sine distribution are similar in some respects but differ in others. The opposing expert witnesses disagree as to their similarities and differences. We frankly admit that we cannot understand the difference between the two types of distribution well enough to say with any assurance which expert was correct.

One basic contention of counsel for the plaintiff-appellant with respect to infringement, however, we at least think we understand. Wherefore we decide this case on that issue alone.[6] This is his assertion that the defendant infringes because it uses in the rotor of its accused machines a "stationary magnetic field" new to the art with Nyyssonen.

We start with consideration of the meaning in Nyyssonen's patents of a "stationary magnetic field." This is necessary because magnetic fields may be either stationary in time or stationary in space with reference to a magnet. (Of course, if a magnet is physically moved its field, *i.e.*, the space near the magnet in which its magnetic forces are sensible, will of necessity move with it.) A magnetic field is stationary in time when its polarity does not change, as is the case with a permanent magnet or an electro magnet energized by a direct current of electricity. In such magnets the north pole is always the north pole and the south pole is always the south pole. An electro-magnet energized by an alternating current of electricity, however, changes its polarity with the frequency of the current. Its field, therefore, is not stationary but alternating in time.

The magnets in the rotor of Nyyssonen's machines are activited by direct current and so their magnetic fields are

---

[6] The court below found: "The windings of the accused machines are different from Nyyssonen's, function differently from Nyyssonen's, and any similarity in result is produced in a different way."

stationary in time as well as, necessarily, stationary in space with respect to their magnets. The magnets in the rotors of the defendant's accused devices, however, are activated by alternating current. Wherefore their fields are not stationary in time, although, of course, their fields are stationary with reference to their magnets as in Nyyssonen and everywhere else. There being no doubt that Nyyssonn activated the magnets in his rotor by direct current and there being equally no doubt that the defendant activited the magnets in its rotors by alternating current, claim 10 of the 098 patent can be made to read on the accused devices only if "stationary" means space, not time. Indeed, the plaintiff's expert made it clear that stationary had to read in a spatial sense to make claim 10 read on the defendant's synchros.

The defendant's expert, however, took the view that "stationary" in the Nyyssonen patents referred to time insofar as the magnets in the rotors of his devices were concerned. He testified:

> "Q. Does the Nyyssonen machine as described in the Nyyssonen patent have a stationary field for the rotor?
>
> "A. It has a stationary field with respect to the rotor.
>
> * * *
>
> "Q. Do the accused structures have a stationary field?
>
> "A. The accused structures do not have a stationary field with respect to the rotor.
>
> "Q. In what sense is the field of the accused structures not stationary?
>
> "A. It is alternating."

The court below took the defendant's expert witness' view of the patent. It found that claim 10 of the 098 patent did not read on the accused synchros because: "The rotor field is not stationary, but varies by alternating. As used in the Nyyssonen patent 'stationary' means a direct current

excited field, absent from the accused synchros." Thus the issue turns upon whether "stationary" as used in the patents means stationary in time or stationary in space.

In resolving this issue the court below relied upon the defendant's expert witness. This was quite proper, for a patent speaks to its art and what it says can be told in complicated cases like this only by one skilled in the art. In *B. F. Sturtevant Co.* v. *Massachusetts Hair & Felt Co.*, 122 F.2d 900, 908 (C.A. 1, 1941), *cert. denied*, 315 U.S. 823 (1942), this court held that an expert witness might testify that a patented invention was not disclosed in the prior art. By the same token we think an admitted expert may say what a complicated patent covers and discloses to its art. The question is the credibility of the witness and that primarily is for the trial court under Rule 52(a). Indeed, as the Court pointed out in *Graver Tank & Mfg. Co.* v. *Linde Air Products Co.*, 336 U.S. 271, 274 (1949), to no type of case is the admonition to give due regard to the opportunity of the trial court to judge the credibility of witnesses more appropriately applicable than to cases like the present ". . . where the evidence is largely the testimony of experts as to which a trial court may be enlightened by scientific demonstrations." We think the trial court's interpretation of the patent in the respect under consideraion is clearly correct and from this it follows that the conclusion of non-infringement is also correct.

So far we have only mentioned but not considered claim 1 of the 131 patent for a Polyphase Transformer System, a device which has no moving parts. This is because the parties have laid little stress on this claim apparently being almost in agreement that it stands or falls with claim 10 of the 098 patent. Plaintiff's counsel, however, contends that it is possible to find claim 1 infringed "if this court should hold [as we do] that the magnetic field of the rotor of the accused multipolar synchro is not stationary, because it is

alternating." Without more illumination than we get from the plaintiff's brief we cannot pass intelligently on this assertion. We need not invite further brief and argument, however, even if we should be disposed to allow plaintiff's counsel another bite at the cherry when his brief is 147 pages and his reply brief adds 25 pages, because we think it clear that claim 1 is invalid for double patenting over claim 10 of the 098 patent by merely using the word "circuits" in place of the word "slots."

In deciding this appeal only on the issue of infringement we are not unmindful of the desirability of disposing of patents as a whole to the end that invalid patents "should not remain in the art as a scarecrow," to quote the late Judge Learned Hand in *Bresnick* v. *United States Vitamin Corp.*, 139 F.2d 239, 242 (C.A. 2, 1943). See this court's discussion in *Hale* v. *General Motors Corp.*, 147 F.2d 383, 388 (C.A. 1, 1945). The reason for our limiting our consideration to the issue of infringement in this case is that we cannot say with any assurance that Nyyssonen's patents are indeed invalid and we think it would be unwise in this situation to run the risk of mistaking a scarecrow for a farmer leaning on his hoe, to carry on Judge Hand's picturesque simile.

This, however, does not imply any criticism whatever of the court below for deciding both validity and infringement. The court below took the proper course to avoid remand and perhaps retrial, should its decision of but one of the issues be reversed on appeal.

The disposition we make of this appeal renders unnecessary any consideration of the appellant's other contentions. His appeals from the denial of his motions under Rules 52(b) and 59(a) relate to the issue of validity.

Judgment will be entered affirming the judgment of the District Court insofar as it rests upon the issue of infringement.

APPENDIX B

(R. 952-954) MEMORANDUM

April 29, 1963

Wyzanski, D. J.

This is a suit for infringement of claims 1 and 10 of Nyyssonen U. S. Patent No. 2,790,098 and claim 1 of Nyyssonen U. S. Patent No. 2,790,131 entitled respectively Polyphase Synchronous Machine and Polyphase Transformer System.

This case presents great difficulties to a judge who, like myself, has only the most elementary training in science and mathematics, and has little experience with modern technological developments. In effect, my position with respect to the facts is hardly better than that of an average juror in an ordinary patent case.

Careful attention to the witnesses as they testified and a re-reading of the transcript persuades me that the most expert, the clearest, and the most credible witness was Professor Richard H. Frazier of M.I.T. who testified for defendant. I have not been unmindful of his long term association with defendant and with the natural bias which may affect an expert called and employed by one of the parties. Yet, with full discount for those factors, I conclude that his testimony is reliable, on critical points is not substantially different from what he would have reported to this Court had he been named its Master, and on all essential technical controversies should govern my findings.

It would be possible for me to go through the record preparing a summary of Dr. Frazier's testimony. Instead, in view of the extreme technicality of the subject-matter and the serious risk that unless I rigorously adhered to

precise quotation of the testimony I would make scientific and technological errors, it seemed to me better to allow each party to prepare a set of draft findings of fact.

Defendant's draft, as appears from supporting citations, rests, in the places where the issues are sharpest, upon Dr. Frazier's testimony and upon admissions by plaintiff's counsel and plaintiff's own expert. My own findings of fact are in most respects verbatim copies of this draft, but these findings do reflect my independent and meticulous check of the record itself.

I have also read with care, and checked against the record, plaintiff's proposed findings. I reject those proposed findings even where they approximately duplicate the findings I have made, but I treat them as specific objections to the findings and conclusions I have made and also, of course, as requested but rejected findings.

Those proposed plaintiff's findings shall be regarded as incorporated in the formal record, and may serve as a basis for arguing to an appellate court that I was in error.
Charles E. Wyzanski, Jr., D.J.

United States District Judge

* * *

FINDINGS OF FACT

April 29, 1963

* * *

(R. 957)

15. The gist of the patent therefore resides in the numbers of conductors in each slot and their inter-connection. This has been called the conductor distribution.

* * *

(R. 959)

27. The '131 patent is directed to a "Polyphase Transformer System". This patent has no moving parts. * * *

This electromagnetic system is exactly that which forms the stator of the '098 patent. The claim 1 in suit is directed to such a system.

* * *

(R. 965-966)

58. Claim 10 of the '098 patent does not read on the accused synchro because:

* * *

f. The rotor field is not stationary, but varies by alternating. As used in the Nyyssonen patent "stationary" means a direct-current-excited field, absent from the accused synchros.

* * *

59. Claim 1 of the '131 patent does not read on the accused synchros because the accused synchros do not have "phase windings" with the recited characteristics.

60. Claim 1 of the '098 patent does not read on the accused synchros because:

a. The "magnetic system" * * * of magnetic fluxes is not "stationary" and the rotor field is not "stationary" but both are alternating.

* * *

(R. 969)

CONCLUSIONS OF LAW

* * *

2. Claim 1 of U. S. Patent No. 2,790,131 is invalid for double patenting.

* * *

APPENDIX C

Excerpt from

(R. 970) PLAINTIFF'S MOTION UNDER RULE 52(b)

* * *

(R. 1002-1003) Finding 58

* * *

Finding 58f should also be deleted. The rotor field winding that is referred to in this Finding 58f, though alternating, is nevertheless stationary with respect to the rotor, in the sense that it does not depart from its location on the rotor. The words "may be", in column 3, line 60 of patent 2,790,098, are used with the very purpose in view of not confining the plaintiff's inventions to use with only direct-current excitation of the rotor.

* * *

Excerpts from

(R. 1014) PLAINTIFF'S MOTION UNDER RULE 59(a)

* * *

(R. 1017-1019)

The Court accepts Professor Frazier's testimony as "not substantially different from what he would have reported to this Court had he been named its Master".

A master, however, would have taken testimony, instead of, as here, offering it himself.

A master, moreover, would have been impartial, whereas Professor Frazier here served in the capacity of a biased advocate.

* * *

Thirdly, before a master, under Rule 53(e)(II) of the Federal Rules of Civl Procedure, the plaintiff would have been

allowed to object to the master's report, and to argue the same before the Court, and the Court would have been afforded an opportunity to "modify it" or to

> "reject it in whole or in part or may receive further evidence".

Rule 53(e)(V), moreover, provides further that

> "Before filing his report a master may submit a draft thereof to counsel for all parties for the purpose of receiving their suggestions".

The plaintiff has been deprived of all these safeguards. They would be restored to him, however, upon the granting of the present motion.

* * *

APPENDIX D

(R. 1026-1027)

MEMORANDUM

May 13, 1963

Wyzanski, D.J.

This Court has studied plaintiff's motions under Rules 52(b) and 59(a). These motions speak for themselves. They include an attack upon the character and good faith of Professor Frazier (an academic colleague of whom plaintiff's counsel spoke in the highest terms during the trial) and an implied appeal to this Court to disregard the judicial oath to do equal justice to the poor and the rich and to decide technical questions (involving the validity and infringement of patents) with reference to the comparative wealth of the parties.

Every major point raised in these motions was before plaintiff's counsel (and to a large extent dealt with by

him) when he filed his briefs, requests for findings, and objections to findings before this Court entered its findings.

After careful consideration this Court concluded originally, and remains of the view, (1) that plaintiff's patent claims here in issue do not represent that kind of advance over the prior art which represents invention and (2) even more clearly, that plaintiff has not borne the burden of proving by a preponderance of the credible evidence that defendant's accused devices are within his claims. In reaching these conclusions this Court, while responsive to the persuasive forms of statement by defendant's counsel, has reached its own judgment.

Of course, such a judgment by a layman in a field of advanced technology is less likely to reflect original thought or expression than a deliberate, informed, conscientious choice between proferred courses of action. It is no service to the integrity of the process of justice or the development of the law for a judge to pretend otherwise.

As a matter of judicial discretion, this Court declines to hear oral argument in support of these more than ample written motions. As a matter of substantive law, this Court denies the motions on their merits.

Motions denied.

Charles E. Wyzanski, Jr., D.J.
United States District Judge

APPENDIX E

Excerpts from Cross Examination of the Defendant's Expert, Professor Frazier (R. 640-641)

Q. May I call your attention to column 3, line 60 of the 098 patent? Here it refers to the use of direct current to produce a magnetic field stationary with respect to the rotor—correct?

A. Yes.

Q. Is that not susceptible of two interpretations, Dr. Frazier: One, that the field, because it's direct current, is of constant amplitude so in that sense it's stationary; and, two, that the field doesn't move out of the space that it is created in with respect to the rotor but moves as a unit with the rotor?

A. Well, you may interpret it that way.

Q. And if I interpret it the second way that that is what the language means, *stationary with respect to the rotor, is it not in that second interpretation also true of the rotor of a synchro that has an oscillating current on it but the space occupied by the field is fixed and moves with the rotor?*

A. *It is true in that interpretation,* but I do not subscribe to the interpretation.

Q. But it is true with respect to that interpretation?

A. That's right (italics supplied).

* * *